# Instruction

manual

## **Double Insulated Shear**



## **IMPORTANT**

Please make certain that the person who is to use this equipment carefully reads and understands these instructions before starting operations.

The Model and Serial No. plate is located on the main housing of the tool. Record these numbers in the spaces below and retain for future reference.

Model No. \_\_\_\_\_

Serial No. \_

Part No. 697839-8810



## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

## READ AND FOLLOW ALL INSTRUCTIONS.

There are certain applications for which this tool was designed. Porter-Cable strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Porter-Cable and we have advised you.

Manager of Product Engineering Porter-Cable Corporation Youngs Crossing at Highway 45 P.O. Box 2468 Jackson, TN 38302-2468

- 1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
- 2. AVOID DANGEROUS ENVIRONMENT. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep area well lit. Avoid chemical or corrosive environment. Do not use tool in presence of flammable liquids or gases.
- **3. GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
- **4. KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- 5. STORE IDLE TOOLS. When not in use, tools should be stored in dry, and high or locked-up place out of the reach of children.
- **6. DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
- 7. USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy duty tool. Don't use tool for purpose not intended—for example—do not use a circular saw for cutting tree limbs or logs.
- **8. DRESS PROPERLY.** Do not wear loose clothing or jewelry. Loose clothing, draw strings and jewelry can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working. Wear protective hair covering to contain long hair.
- 9. USE SAFETY GLASSES. Wear safety glasses or goggles while operating power tools. Also face or dust mask if operation creates dust. All persons in the area where power tools are being operated should also wear safety glasses and face or dust mask.
- 10. DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges. Have damaged or worn power cord and strain reliever replaced immediately.

- **11. SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- **12. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Have all worn, broken or lost parts replaced immediately. Keep handles dry, clean and free from oil and grease.
- **14. DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories such as blades, bits, cutters, etc.
- **15. REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
- **16. AVOID UNINTENTIONAL STARTING.** Do not carry a plugged-in tool with finger on switch. Be sure switch is off when plugging in. Keep hands, body and clothing clear of blades, bits, cutters, etc. when plugging in the tool.
- 17. OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords marked "Suitable for use with outdoor appliances store indoors when not in use."
- **18. STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired or while under the influence of medication, alcohol or drugs.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

SAVE THESE INSTRUCTIONS

## ADDITIONAL SAFETY RULES FOR SHEARS

- 1. **ALWAYS** hold the tool as instructed in "How To Hold Tool" section. This will prevent accidental electrical shock resulting from cutting a live wire when cutting into a wall or other blind area.
- 2. **KEEP** hands away from cutting area.
- 3. ALWAYS use sharp cutting tools.
- 4. **STAY CLEAR** of end pieces that may fall after being cut off.
- 5. **ALWAYS KEEP** the power cord away from the edge of the material being sheared. Sharp edges can result in the cord insulation being cut. This condition may create an electrical hazard.

## REPLACEMENT PARTS

When servicing use only identical replacement parts.

## **MOTOR**

Most Porter-Cable tools will operate on either D.C., or single phase 25 to 60 cycle A.C. current and voltage within plus or minus 5 percent of that shown on the specification plate on the tool. Refer to the specification plate on your tool for proper voltage and current rating.

**CAUTION:** Do not operate your tool on a current on which the voltage is not within correct limits. Do not operate tools rated A.C. only on D.C. current. To do so may seriously damage the tool.

## **EXTENSION CORD SELECTION**

If an extension cord is used, make sure the conductor size is large enough to prevent excessive voltage drop which will cause loss of power and possible motor damage. A table of recommended extension cord sizes will be found below. This table is based on limiting line voltage drop to 5 volts (10 volts for 230 volts) at 150% of rated amperes.

If an extension cord is to be used outdoors it must be marked with the suffix W-A following the cord type designation. For example — SJTW-A to indicate it is acceptable for outdoor use.

### RECOMMENDED EXTENSION CORD SIZES FOR USE WITH PORTABLE ELECTRIC TOOLS

| Length of Cord in Feet  |       |        |         |         |         |         |         |         |         |          |
|-------------------------|-------|--------|---------|---------|---------|---------|---------|---------|---------|----------|
| 115V                    |       | 25 Ft. | 50 Ft.  | 100 Ft. | 150 Ft. | 200 Ft. | 250 Ft. | 300 Ft. | 400 Ft. | 500 Ft.  |
|                         | 230V  | 50 Ft. | 100 Ft. | 200 Ft. | 300 Ft. | 400 Ft. | 500 Ft. | 600 Ft. | 800 Ft. | 1000 Ft. |
| Nameplate Ampere Rating | 0-2   | 18     | 18      | 18      | 16      | 16      | 14      | 14      | 12      | 12       |
|                         | 2-3   | 18     | 18      | 16      | 14      | 14      | 12      | 12      | 10      | 10       |
|                         | 3-4   | 18     | 18      | 16      | 14      | 12      | 12      | 10      | 10      | 8        |
|                         | 4-5   | 18     | 18      | 14      | 12      | 12      | 10      | 10      | 8       | 8        |
|                         | 5-6   | 18     | 16      | 14      | 12      | 10      | 10      | 8       | 8       | 6        |
|                         | 6-8   | 18     | 16      | 12      | 10      | 10      | 8       | 6       | 6       | 6        |
|                         | 8-10  | 18     | 14      | 12      | 10      | 8       | 8       | 6       | 6       | 4        |
|                         | 10-12 | 16     | 14      | 10      | 8       | 8       | 6       | 6       | 4       | 4        |
|                         | 12-14 | 16     | 12      | 10      | 8       | 6       | ΰ       | 6       | 4       | 2        |
|                         | 14-16 | 16     | 12      | 10      | 8       | 6       | 6       | 4       | 4       | 2        |
|                         | 16-18 | 14     | 12      | 8       | 8       | 6       | 4       | 4       | 2       | 2        |
|                         | 18-20 | 14     | 12      | 8       | 6       | 6       | 4       | 4       | 2       | 2        |

## **OPERATING INSTRUCTIONS**

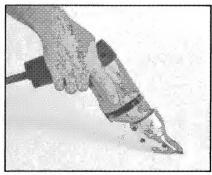
## **FOREWORD**

The Porter-Cable Model 7602 Shear is designed for cutting cold rolled steel sheets of up to 18 Ga. and stainless steel sheets of up to 20 Ga. Both straight and curved cuts (minimum radius: 7") may be made.

The Shear removes a 7/32" wide, continuous curl of waste material without bending or burring the finished workpiece.

## **HOW TO HOLD SHEAR**

**WARNING:** The gear housing, intermediate plate, and cutting head may be made live if the tool cuts into live wiring. To prevent accidental shock: the tool must be held as shown in Fig. 1.



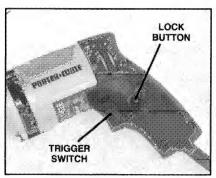


Fig. 1

Fig. 2

## TO START AND STOP SHEAR

**CAUTION:** Make sure switch is in OFF position and hands; body and clothing are clear of cutting head before connecting tool to power circuit.

- 1. Squeeze trigger switch (Fig. 2) to start motor. Release trigger switch to stop motor.
- 2. A lock button (Fig. 2) is provided to keep motor running without holding the trigger switch ON.
- 3. To lock the trigger switch ON, squeeze the trigger as far as it will go, push in lock button and release trigger.
- 4. To unlock lock button, squeeze trigger and release, leaving lock button free to spring out.
- 5. As the trigger switch is squeezed, the cutting speed increases.

## **HOW TO USE SHEAR**

Be sure the material to be sheared is firmly supported. Clamping is recommended to insure control of the tool and the workpiece. Place side knives of shear slightly on the edge of the top side of the workpiece to steady tool. Squeeze the trigger switch and guide shear into work. The tool cuts freely with only slight pressure. Forcing the tool will not make it cut faster. Always use sharp cutters. A light coat of suitable cutting fluid applied along the line of cut will increase cutter life.

A cut-out within the perimeter of the work piece may be produced by drilling a 1/2" diameter starting hole, then following directions above.

## REPLACING CUTTERS

Replacement cutters are listed in the ACCESSORIES section of this manual. Replacement cutters are installed as follows:

**CAUTION:** Disconnect tool from power source.

Remove shear head from motor by loosening three cap screws (A) Fig. 3 and pulling head firmly forward. Slight twisting action may be required if head does not slide off easily.

Remove cutter blades from shear head by removing three cap screws (A) completely from shear housing (B). Be careful not to lose rear spacer bushing (C) when removing middle cap screw. Remove center blade from shear housing by tapping blade gently rearward. Be careful not to lose spacer bushing (C) from hole in center blade. Side knife (D) and side spacer (E) will now drop out of the shear housing.

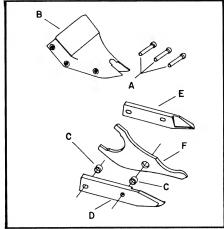


Fig. 3

Install cutter blades into shear housing (B) Fig. 3, by placing the side knife and side spacer into position in the shear housing. Insert center cap screw (A) through side knife and side spacer with rear spacer bushing (C) between them and start cap screw into thread just enough to hold blades in place. DO NOT TIGHTEN. Insert spacer bushing (C) into hole in center blade and lubricate with bearing grease. Install center blade into shear housing by tapping blade gently forward using a drift to line up hole in center blade with forward holes in housing. Insert and tighten forward cap screw (A) making sure spacer bushing (C) in center blade stays in position. Apply bearing grease to yoke in center blade where it rides on the eccentric bearing assembly. Insert rear cap screw (A) into shear housing but do not completely tighten.

Install shear head assembly onto drive motor by making sure all cap screws (A) are loosened about three or four complete turns. Place shear head onto unit and tighten cap screws snugly to lock head assembly in place. It may be necessary to gently tap the shear head into place if it does not readily slip onto the nose of the power unit.

## **BRUSH AND INSPECTION LUBRICATION**

For your continued safety and electrical protection, brush inspection and replacement on this tool should ONLY be performed by an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE SERVICE CENTER.

Once every three months, depending upon usage, remove the shear head from the power unit following the instructions in the REPLACING CUTTERS section of the manual.

**CAUTION:** Disconnect tool from power source before disassembling.

Put a few drops of heavy oil on the eccentric bearing assembly so that it saturates the needle bearing. The outside surface of the eccentric bearing ring and the yoke of the center blade should be coated with bearing lubricant.

At approxiamately 100 hours of use, take or send your tool to your nearest Authorized Porter-Cable Service Station to be thoroughly cleaned and inspected; worn parts replaced, when necessary; relubricated with fresh lubricant, if required; reassembled with new brushes; and performance tested.

Any loss of power before the above maintenance check may indicate the need for immediate servicing of your tool. DO NOT CONTINUE TO OPERATE TOOL UNDER THIS CONDITION. If proper operating voltage is present, return your tool the Service Station for immediate service.

## SERVICE AND REPAIRS

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations, including brush inspection and replacement, should ONLY be performed by either an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE SERVICE CENTER. All repairs made by these agencies are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by anyone other than these agencies.

Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all information shown on the nameplate of your tool (model number, type, serial number, etc.).

## **ACCESSORIES**

The testing of this tool has been accomplished with the following accessories. For safest operation, it is recommended that only these accessories be used with this product.

**WARNING** - Since accessories other than those listed have not been tested with this product, use of such accessories could be hazardous.

No. 12622 Center Replacement Blade

No. 12623 Left Replacement Blade (Side Spacer)

No. 12624 Right Replacement Blade (Side Knife)

No. 18338 Lubricant (For Shear Head)

## PORTER-CABLE SERVICE CENTERS

Parts and Repair Service for Porter-Cable Power Tools are Available at These Locations

#### ALABAMA

Birmingham 35209 131 West Oxmoor Road Suite 105 Phone: (205) 942-6325

#### CALIFORNIA

City of Industry 91745 (Los Angeles) 1305 John Reed Court Phone: (818) 333-3566

San Leandro 94577 (Oakland) 3039 Teagarden Street Phone: (415) 357-9762

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Denver 80204 2561 West 8th Avenue Phone: (303) 892-6113

## CONNECTICUT

Manchester 06040 (Hartford) 57 Tolland Turnpike Phone: (203) 646-1078

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Tampa 33609 4538 W. Kennedy Boulevard Phone: (813) 877-9585

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#### ILLINOIS

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#### •

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#### MARYLAND

Baltimore 21205 4714 Erdman Avenue Phone: (301) 483-3100

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Southfield 48075 (Detroit) 18650 W. Eight Mile Road Phone: (313) 569-4333

Minneapolis 55429 4315 68th Avenue North Phone: (612) 561-9080

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#### 01110

Columbus 43214 4560 Indianola Avenue Phone: (614) 263-0929

Valley View 44125 (Cleveland) Sweet Valley Business Park, Unit #18 Phone: (216) 447-9030

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San Antonio 78218 Suite 107 2800 N.E. Loop 410 Phone: (512) 654-1061

#### UTAH

Salt Lake City 84115 2990 Southwest Temple Phone: (801) 487-4953

Richmond 23230 1705 Dabney Road Phone: (804) 257-7348

#### WASHINGTON

Renton 98055 (Seattle) 268 Southwest 43rd Street Phone: (206) 251-6680

#### WISCONSIN

Milwaukee 53222 10700 W. Burleigh Street Phone: (414) 774-3650

Authorized Porter-Cable Service Stations are located in all large cities. For the one nearest you, see the classified section in your phone book (under "Tools-Electric").

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## PORTER-CABLE LIMITED ONE YEAR WARRANTY

Porter-Cable warrants its Professional Power Tools for a period of one year from the date of original purchase. We will repair or replace at our option, any part or parts of the product and accessories covered under this warranty which examination proves to be defective in workmanship or material during the warranty period. For repair or replacement return the complete tool or accessory, transportation prepaid, to your nearest Porter-Cable Service Center or Authorized Service Station as listed under "TOOLS-ELECTRIC" in the Yellow Pages of your telephone directory. Proof of purchase may be required. This warranty does not apply to repair or replacement required due to misuse, abuse, normal wear and tear or repairs attempted or made by other than our Service Centers or Authorized Service Stations.

To obtain information on warranty performance please write to: PORTER-CABLE CORPORATION, Youngs Crossing At Highway 45, P.O. Box 2468, Jackson, Tennessee 38302-2468; Attention: Product Service. The foregoing obligation is Porter-Cable's sole liability under this or any implied warranty and under no circumstances shall Porter-Cable be liable for any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts on the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

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